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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ABELSON, RONALD B

ART UNIT PAPER NUMBER

2666

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,888

Applicant(s)

BARANY ET AL.

Examiner

Wanda Eugene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/15/2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-4.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 114 page 11, line 15. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-11, 14, 16-18, 21, 29, 30, 33 and 38-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Turina (6,031,832).

Regarding claim 1, Turina discloses a call in a wireless network, comprising: sending a request for a packet-switched call over the wireless network (**VIP MS sends a channel reservation request message over a random access sub-channel** col. 6 lines 3-4); and communicating control signaling in a traffic channel of the wireless network to establish the packet-switched call (**network sends a dedicated physical traffic channel assignment message over a packet access grant channel or control channel** col. 6 lines 20-22).

Regarding claim 2, Turina discloses, sending the request comprises sending the request in a random access channel (**a VIP channel reservation request message can be sent over the Random Access Channel RACH** col. 6 lines 6-8).

Regarding claim 3, Turina discloses sending the request comprises sending a predefined code in a random access channel of an Enhanced General Packet Radio Services system (**the requested message indicates the VIP priority in the GPRS sent over the random access channel** col. 6 line 5-10).

Regarding claims 4 and 21 Turina discloses, sending the code comprises sending the code in a channel selected from the group consisting of a RACH, PRACH, and CPRACH (**sending the request message with a VIP priority over the uplink PRACH or RACH** col. 6 lines 7-8).

Regarding claim 5, Turina discloses, retrieving a pre-assigned code to send in the request (**the network initiates the transfer of a data packet to VIP MS 16** col. 5 lines 63-64).

Regarding claim 6, Turina discloses retrieving the pre-assigned code comprises retrieving a random access channel mobile station code (**the VIP MS message sent over a random access channel has a VIP priority to the network. It is inherent that the network retrieves the sent message** col. 6 lines 5-9).

Regarding claim 7, Turina discloses communicating the control signaling comprises communicating the control signaling in a packet data traffic channel (**the network sends the packet over dedicated PDTCH** col. 6 lines 29-30).

Regarding claim 8, Turina discloses communicating the control signaling comprises communicating the control signaling in PDTCH bursts of an Enhanced General Packet Radio Services system (**network sends via the packet resource assignment message, messages over the packet data traffic channels in the GPRS** col. 6 lines 29-31).

Regarding claim 9, Turina discloses communicating the control signaling comprises communicating the control signaling in a packet data traffic channel mapped to a dedicated physical channel (**network sends packets over the downlink dedicated PDTCH in the GPRS** col. 6 lines 29-31).

Regarding claim 10, Turina further discloses comprising communicating bearer traffic in another traffic channel mapped to the dedicated physical channel (**packet paging messages sent over downlink paging channel** col. 5 lines 65-67).

Regarding claims 11 and 18, Turina discloses, communicating the control signaling comprises communicating the control signaling in a PDTCH (**network sends packet over PDTCH in the GPRS** col. 6 lines 29-31), and communicating the bearer traffic comprises communicating the bearer traffic in a TCH (**network sends a dedicated physical traffic channel assignment message over a packet access grant channel** col. 6 lines 20-25), the PDTCH and TCH defined according to an Enhanced General Packet Radio Services protocol.

Regarding claim 14, Turina discloses further comprising sending a release message to terminate the packet-switched call in a traffic channel (**Assigned uplink and downlink packet data channels are also released for other traffic in response to a signal from either the VIP MS 16 or the network** col. 7 lines 60-65).

Regarding claim 16, Turina discloses, further comprising sending quality-of-service related messages in a traffic channel (**QoS negotiation sent across channels, can be known within the network** col. 6 lines 9-11).

Regarding claim 17, Turina discloses, wherein sending the quality-of-service related messages comprises sending Resource Reservation Protocol messages (**QoS based on RSVP** col. 6 lines 11-13).

Regarding claims 20 and 22, Turina discloses an article comprising one or more storage media containing instructions that when executed cause a controller to send control signaling to request a channel for a packet-switched call over a wireless network (**VIP MS sends a channel reservation request message over a random access sub-channel** col. 6 lines 3-4); and add a predetermined code (**VIP priority col. 5 lines 38-44**) into the control signaling to identify the call as a packet-switched call (**the request may indicate that the VIP MS has a VIP priority** col. 6 lines 5-6).

4. Claims 29 and 30 rejected under 35 U.S.C. 102(e) as being anticipated by Malmlof (U.S. 6,594,241).

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Regarding claim 29, Malmlof discloses a mobile station for use in a wireless communications system having base stations (**BS 28** fig. 4), comprising a storage element (**memory 62** fig. 6) storing a predetermined code associated with packet switched calls (**memory stores programs and data associated with received signal information** col. 8 lines 10-21); and a controller (**data processing and control unit 60** fig. 6) to send control signaling to one of the base stations over a wireless link to set up a packet-based call, the control signaling containing the predetermined code (**the data processing and control unit includes circuitry to control functions of the mobile station thus sending and receiving signals via the base station** col. 8 lines 10-21).

Regarding claim 30 Malmlof discloses control signaling comprises a random access channel (**RACH is employed by the mobile station** col. 7 lines 53-55).

Regarding claim 31 Malmlof teach random access channel comprises a packet random access channels (random access channel for utilization in GPRS, it is).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 33 and 38-41 are rejected under 35 U.S.C. 102(a) as being anticipated by Brooks et al. (EP 1045559).

Regarding claims 33 and 38, Brooks et al discloses an interface to a wireless link capable of communicating with a mobile station (**the base station subsystem processes the RA request**

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from the mobile station col. 4 line 46-47); and a controller adapted to receive a request to set up a packet-switched call over the wireless link, the controller further adapted to assign a logical channel combination in response to the request (**the BSS in return sends a packet immediate assignment message** col. 4 lines 47-48).

Regarding claim 39, Brooks et al discloses instructions when executed cause the system to further communicate bearer data in a second traffic channel (**the BSS will try to activate more channels to allocate data if congestion occur** col. 6 lines 55-58).

Regarding claim 40, Brooks et al discloses the control signaling is carried in a PDTCH (**the MS camps on the PDTCH** col. 4 lines 56-57) and the bearer data is carried in a TCH (**the BSS send the message on the PACCH** col. 5 lines 16-18).

Regarding claim 41, Brooks et al discloses wherein the instruction when executed causes the system to further communicate bearer data in the first traffic channel (**upon receiving a request from MS, BSS sends a message across the channel** col. 4 lines 46-53).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 12, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turina (U.S. 6,031,832) in view of Conreliussen (6,601,099).

Regarding claims 12, 13 and 15 Turina teaches all the limitations of parent claim 1 addressed above. Turina fails to teach communicating the control signaling comprises communicating Session Initiation Protocol messages, communicating a Session Initiation Protocol Invite request and sending a Session Initiation Bye message. Conreliussen teaches signaling sent via SIP server col. 2 lines 33-34 including an Invite message (col. 2 lines 37-38) and a Bye message (col. 3 line 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Session Initiation Protocol message in a packet-switched system in order to provide a simple means of facilitating packet network connections (Conreliussen, col. 1 lines 27-31).

9. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turina in view of Tanaka et al (6671509).

Regarding claim 19, with the features in parent claim 1 addressed above, Turina fails to disclose communicating the control signaling in PDTCH burst and bearer traffic in PDTCH burst.

Tanaka et al. discloses control channels associated with traffic channels are mainly used to transfer control signaling information and user packet data col. 11 lines 40-44. It would be obvious to one of ordinary skill in the art at the time the invention was made to modify Turina as suggested by Tanaka et al. in order to increase efficiency in the capacity of a multicast system generally supported in an IP network.

10. Claims 23, 25-27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turina in view of Maggenti et al (US 20030012149).

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Regarding claims 23, 25, 26 and 27 Turina teaches all the claimed limitations of parent claim 20 addressed above. Turina fails to teach communicating Session Initiation Protocol messages in traffic channels of the wireless network; fails to teach communicate a SIP Invite message; fails to teach communicating response message to the Invite message; and fails to teach communicating Session Initiation Protocol Bye message to release a call. Maggenti et al teaches one traffic channel on an active net of a communication device defined and controlled in a Session Initiation Protocol (par. 0060); placing a call using a SIP "INVITE" (par 0311); initiating an acceptance as a response via the SIP "ACK" command (par 0311); and sending a SIP BYE message to formally terminate participation (par 0311) respectively. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Turina as suggested by Maggenti et al to communicate via SIP messages in order to create a simpler means of operations in respect to a number of different messages.

Regarding claim 26, Turina teaches all the claimed limitations of parent claim 25 addressed above. The combination of Turina and Maggenti et al further teaches the claimed limitations of claim 26 as addressed above.

Regarding claim 27, Turina teaches all the claimed limitations of parent claim 23 addressed above. The combination of Turina and Maggenti et al further teaches the claimed limitations of claim 27 as addressed above.

Regarding claim 28, Turina teaches all the claimed limitations of parent claim 23 addressed above. Turina fails to teach discloses communicating messages to provide a supplementary service. Maggenti et al. teaches point-to-point voice service option and other data services call

par. 0393. Processing a call over a packet switched network includes call set up call termination and the additional services that are afforded to call services. It would have been obvious to one of ordinary skill in the art the time the invention was made to modify Turina with a supplementary services as suggested by Maggenti et al. in order to fully utilize the multi capabilities of a call system.

11. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turina in view of Hasan et al. (6,707,813).

Regarding claim 24, Turina teaches all the claimed limitations of parent claim 23 addressed above and PDTCH in GPRS systems. Turina fails to teach communicate the Session Initiation Protocol messages in PDTCH. Hasan et al. discloses packet switched mobile access systems GPRS using SIP call control protocol in many applications col. 2 lines 35-40. It is known that SIP while performing basic call-control tasks such as session set up and tear down, or the signaling for call initiation and termination, is a type of control signaling. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Turina to include a specific control signaling in order to further provide a unified communication system.

12. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malmlof (U.S. 6,594,241).

Malmlof teaches all the limitations of parent claims 29 and 30 addressed above. Malmlof does not teach teaches a packet random access channel. Malmlof teaches a random access channel for utilization in a packet radio network of GPRS col. 7 lines 16-20. It is an inherent feature in a packet-switched network such as GPRS for the random access channel to be as a packet random access channel. It would have been obvious to one of ordinary skill in the art at the time

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the invention was made for Malmlof to utilize packet random access channels for signal information arriving on the uplink whose quality of service parameters are specified to a packet-switched network. The motivation for doing so is to provide an accessible means to the IP network via a packet-switched network core node.

Regarding claim 32, the combination of Malmlof and Turina teaches all the limitations of parent claim 31. The combination of Malmlof and Turina fails to teach a COMPACT packet random access channel. The compact packet random access channel provides services to compact control channels. Therefore, because these two provide a means for the mobile station to commence uplink transfer in a packet switched network, one of ordinary skill in the art would have it obvious to substitute compact packet random access channel for a packet random access channel this selection of any of these known equivalents request GPRS resources on the uplink to would be within the level of ordinary skill in the art.

13. Claims 34-37 are rejected under 35 U.S.C. 103(a) as being obvious over Brooks et al (EP 1045559) in view of Bloebaum et al. (6,204,808).

Regarding claim 34, Brooks et al discloses all the limitations of parent claim 33, addressed above. Brooks et al fails to disclose the logical channel combination comprises TCH + FACCH + SACCH + PDTCH + PACCH + PTCCH. Bloebaum et al. discloses GSM channel consisting of multi frames used to support TCH, SACCH, FACCH, PACCH, and PDTCH col. 7 lines 54-67 and col. 8 lines 1-21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Brooks et al as suggested by Bloebaum to communicate through the network fully utilizing the logical channels thus improving in the full usage of the channels and overall efficiency of the system.

Regarding claim 36, Brooks et al discloses communicate a success indication of a packet-switched call session in a PACCH burst (**the BSS sends to the MS an assignment on the PACCH** col. 5 lines 13-17).

Regarding claim 37, Brooks discloses communicating radio resource management signaling in a PACCH burst to indicate a state of the packet-switched call (**the BSS sends to the MS a packet resources assignment on the PACCH** col. 5 lines 13-17).

14. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks in view of Hasan et al. (6,707,813).

Regarding claim 24, Brooks teaches all the claimed limitations of parent claim 34 addressed above and PDTCH in GPRS systems. Brooks fails to teach communicate the Session Initiation Protocol messages in PDTCH. Hasan et al. discloses packet switched mobile access systems GPRS using SIP call control protocol in many applications col. 2 lines 35-40. It is known that SIP while performing basic call-control tasks such as session set up and tear down, or the signaling for call initiation and termination, is a type of control signaling. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Brooks to include a specific control signaling in order to further provide a unified communication system.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Molno et al. (U.S. 2001/0030949) Method and apparatus for associated signaling in a wireless communications network.

Forslow (U.S. 6,608,832) Common access between a mobile communication network and an external network with selectable packet_switched and circuit_switched services

Thompson (U.S. 20030053447) System for interconnecting standard telephony communications equipment to Internet Protocol networks

Rimhagen et al. (U.S. 6,721,278) Dynamic allocation of packet data channels

Malcom (U.S. 6,385,179) Packet and circuit switched communication network method and apparatus

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ra
Ronald Abelson
Examiner
Art Unit 2666

6/14/04

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